What is claimed is:

1.   A system for providing feedback to an individual patient for
automated remote patient care, comprising:

     a medical device adapted to be implanted for the individual patient
collecting and regularly recording a device measures set comprising individual
device measures which each relate to patient information;

     a remote client processing voice feedback into a set of quality of life
measures which each relate to patient self-assessment indicators, the voice
feedback having been spoken by the individual patient into a remote client
substantially contemporaneous to the collection of an identifiable device measures
set;

     a database collecting the set of measures from the medical device by
storing the collected device measures set, the identified collected device measures
set, and the quality of life measures set into a patient care record for the individual
patient within a database organized to store one or more patient care records
which each comprise a plurality of the collected device measures sets, the
identified collected device measures set, and the quality of life measures set;

     a server periodically receiving the identified collected device measures set
and the quality of life measures set respectively from the medical device and the
remote client, and analyzing the identified collected device measures set, the
quality of life measures set, and one or more of the collected device measures sets
in the patient care record for the individual patient relative to one or more other
collected device measures sets stored in the database server to determine a patient
status indicator.

2.   A system according to Claim 1, the remote client further
comprising:

     an audio prompter requesting a quality of life measure via a voice prompt
played on the remote client to the individual patient.

3.   A system according to Claim 2, further comprising:

2   a written script comprising a plurality of quality of life measure requests

3   stored within the remote client; and

4   the audio prompter further comprising a speech synthesizer module

5   retrieving each quality of life request from the stored written script with each such

6   retrieved quality of life measure request comprising one such voice prompt and

7   synthesizing speech for playback from the retrieved quality of life request.

1   4.   A system according to Claim 2, further comprising:

2   pre-recorded speech comprising a plurality of quality of life measure

3   requests stored within the remote client; and

4   the audio prompter further comprising a playback module retrieving each

5   quality of life request from the stored pre-recorded speech with each such

6   retrieved quality of life measure request comprising one such voice prompt and

7   playing the pre-recorded speech from the retrieved quality of life request.

1   5.   A system according to Claim 1, the remote client further

2   comprising:

3   a speech engine recognizing individual words in the spoken voice

4   feedback and translating the individual spoken words into written individual

5   words.

1   6.   A system according to Claim 5, further comprising:

2   a voice grammar stored within the remote client, the voice grammar

3   comprising a plurality of speech phrases expressed in a natural language, each

4   speech phrase corresponding to a normalized quality of life measure;

5   the speech engine further comprising:

6   a parser parsing the written individual words into tokens; and

7   a lexical analyzer performing a lexical analysis of the parsed

8   tokens in accordance with the voice grammar to identify one such normalized

9   quality of life measure.

1   7.   A system according to Claim 5, further comprising:

2   a vocabulary stored within the remote client, the vocabulary comprising

3 the written individual words; and

4   the speech engine further comprising a lookup module performing

5 a lookup of the written individual words from the vocabulary stored within the

6 remote client.

1   8. A system according to Claim 1, the remote client further

2 comprising:

3   wherein the remote client comprises at least one of a personal computer,

4 an audio interface, and a telephony instrument.

1   9. A method for providing feedback to an individual patient for

2 automated remote patient care, comprising:

3   regularly recording a set of device measures comprising individual device

4 measures which each relate to patient information by the medical device adapted

5 to be implanted for the individual patient;

6   collecting the device measures set from the medical device;

7   processing voice feedback into a set of quality of life measures which each

8 relate to patient self-assessment indicators, the voice feedback having been

9 spoken by the individual patient into a remote client substantially

10 contemporaneous to the collection of an identifiable device measures set;

11   storing the collected device measures set, the identified collected device

12 measures set, and the quality of life measures set into a patient care record for the

13 individual patient within a database organized to store one or more patient care

14 records which each comprise a plurality of the collected device measures sets, the

15 identified collected device measures set, and the quality of life measures set;

16   periodically receiving the identified collected device measures set and the

17 quality of life measures set respectively from the medical device and the remote

18 client; and

19   analyzing the identified collected device measures set, the quality of life

20 measures set, and one or more of the collected device measures sets in the patient

21 care record for the individual patient relative to one or more other collected

22 device measures sets stored in the database server to determine a patient status
23 indicator.

1   10.   A method according to Claim 9, the operation of processing voice
2 feedback further comprising:
3   requesting a quality of life measure via a voice prompt played on the
4 remote client to the individual patient.

1   11.   A method according to Claim 10, the operation of requesting a
2 quality of life measure further comprising:
3   storing a written script comprising a plurality of quality of life measure
4 requests within the remote client;
5   retrieving each quality of life request from the stored written script with
6 each such retrieved quality of life measure request comprising one such voice
7 prompt; and
8   synthesizing speech for playback from the retrieved quality of life request.

1   12.   A method according to Claim 10, the operation of requesting a
2 quality of life measure further comprising:
3   storing pre-recorded speech comprising a plurality of quality of life
4 measure requests within the remote client;
5   retrieving each quality of life request from the stored pre-recorded speech
6 with each such retrieved quality of life measure request comprising one such
7 voice prompt; and
8   playing the pre-recorded speech from the retrieved quality of life request.

1   13.   A method according to Claim 9, the operation of processing voice
2 feedback further comprising:
3   recognizing individual words in the spoken voice feedback; and
4   translating the individual spoken words into written individual words.

1   14.   A method according to Claim 13, further comprising:

2 storing a voice grammar within the remote client, the voice grammar

3 comprising a plurality of speech phrases expressed in a natural language, each

4 speech phrase corresponding to a normalized quality of life measure;

5 parsing the written individual words into tokens; and

6 performing a lexical analysis of the parsed tokens in accordance with the

7 voice grammar to identify one such normalized quality of life measure.

1 15. A method according to Claim 13, further comprising:

2 storing the written individual words as a vocabulary within the remote

3 client; and

4 performing a lookup of the written individual words from the vocabulary

5 stored within the remote client.

1 16. A method according to Claim 9, the remote client comprises at

2 least one of a personal computer, an audio interface, and a telephony instrument.

1 17. A computer-readable storage medium holding code for providing

2 feedback to an individual patient for automated remote patient care, comprising:

3 code for regularly recording a device measures set comprising individual

4 device measures which each relate to patient information by the medical device

5 adapted to be implanted for the individual patient;

6 code for collecting the set of device measures from the medical device;

7 code for processing voice feedback into a set of quality of life measures

8 which each relate to patient self-assessment indicators, the voice feedback having

9 been spoken by the individual patient into a remote client substantially

10 contemporaneous to the collection of an identifiable device measures set;

11 code for storing the collected device measures set, the identified collected

12 device measures set, and the quality of life measures set into a patient care record

13 for the individual patient within a database organized to store one or more patient

14 care records which each comprise a plurality of the collected device measures

15 sets, the identified collected device measures set, and the quality of life measures

16 set;

17   code for periodically receiving the identified collected device measures set

18   and the quality of life measures set respectively from the medical device and the

19   remote client; and

20   code for analyzing the identified collected device measures set, the quality

21   of life measures set, and one or more of the collected device measures sets in the

22   patient care record for the individual patient relative to one or more other

23   collected device measures sets stored in the database server to determine a patient

24   status indicator.

1   18.   A storage medium according to Claim 17, the operation of

2   processing voice feedback further comprising:

3   code for requesting a quality of life measure via a voice prompt played on

4   the remote client to the individual patient.

1   19.   A storage medium according to Claim 18, the operation of

2   requesting a quality of life measure further comprising:

3   code for storing a written script comprising a plurality of quality of life

4   measure requests within the remote client;

5   code for retrieving each quality of life request from the stored written

6   script with each such retrieved quality of life measure request comprising one

7   such voice prompt; and

8   code for synthesizing speech for playback from the retrieved quality of life

9   request.

1   20.   A storage medium according to Claim 18, the operation of

2   requesting a quality of life measure further comprising:

3   code for storing pre-recorded speech comprising a plurality of quality of

4   life measure requests within the remote client;

5   code for retrieving each quality of life request from the stored pre-

6   recorded speech with each such retrieved quality of life measure request

7   comprising one such voice prompt; and

8   code for playing the pre-recorded speech from the retrieved quality of life
9 request.

1   21.   A storage medium according to Claim 17, the operation of
2 processing voice feedback further comprising:
3   code for recognizing individual words in the spoken voice feedback; and
4   code for translating the individual spoken words into written individual
5 words.

1   22.   A storage medium according to Claim 21, further comprising:
2   code for storing a voice grammar within the remote client, the voice
3 grammar comprising a plurality of speech phrases expressed in a natural
4 language, each speech phrase corresponding to a normalized quality of life
5 measure;
6   code for parsing the written individual words into tokens; and
7   code for performing a lexical analysis of the parsed tokens in accordance
8 with the voice grammar to identify one such normalized quality of life measure.

1   23.   A storage medium according to Claim 21, further comprising:
2   code for storing the written individual words as a vocabulary within the
3 remote client; and
4   code for performing a lookup of the written individual words from the
5 vocabulary stored within the remote client.